| LOCKHEED AIRCRAFT CO. | ENGINEERING STUDY [X] | LAC -91 |
| | CHANGE PROPOSAL [ ] | |

| DATE 8-30-60 | AFFECTS: WSPO [X] | PROJECT [X] |

| NAME OF MAJOR COMPONENT AIRPLANE | PART OR LOWEST SUBASSEMBLY ------ | PART NO. & MODEL OR TYPE ------ |

TITLE OF PROPOSAL : INFLIGHT REFUELING DESIGN STUDY

NATURE OF PROPOSAL:

SEE PAGE 2

REASON FOR PROPOSAL :

To determine the practicability of IFR on U-2A and U-2C aircraft by providing the engineering data necessary to (1) resolve feasibility of the installation and modification of supplementary systems and equipment required to sustain missions of extended range, and (2) ascertain scope of increase in range under various flight profiles.

ES | ESTIMATED COST AND TIME INVOLVED : --
| ADDITIONAL FUNDING REQUIRED : NONE - For this portion of the Engr. Study (SP1918)

CP | ESTIMATED COST FOR KITS OR PARTS :
| ADDITIONAL FUNDING REQUIRED :

ITEMS AFFECTED BY PROPOSAL :

SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL
[ ]	[X]	[ ]	[X]	[X]	[X]	[ ]	[X]	[ ]	[X]	[X]

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

AVAILABILITY __N/A__ WEEKS AFTER APPROVAL

SOURCE OF PARTS FOR KIT
N/A

DISPOSITION OF SPARES AFFECTED
N/A

APPROVED : WSPO

INITIATED BY : LAC PROJECT

PAGE 1 OF 3

SP-E-1A

LAC -91
Page 2 of 3

NATURE OF PROPOSAL:

Make an engineering study only to determine the feasibility of

installing an inflight refueling system in the U-2A and U-2C

aircraft. Both the flying boom and the probe and drogue type

systems will be considered. Consideration shall be given to

the following items:

1. Compatibility of the KC-135 as a tanker.

2. Increase in range using various flight profiles with and with-

   out slipper tanks.

3. The amount of additional oxygen required to fulfill the require-

   ments of (2) above.

4. Improved pilot comfort required by extended duration, including

   additional relief facilities.

5. Improved system of inflight feeding. A revised feeding port has

   been developed that shows promise.

6. Investigate the reliability of the present navigation system when

   used in the polar regions.

7. Adequacy and compatibility of the present communications system.
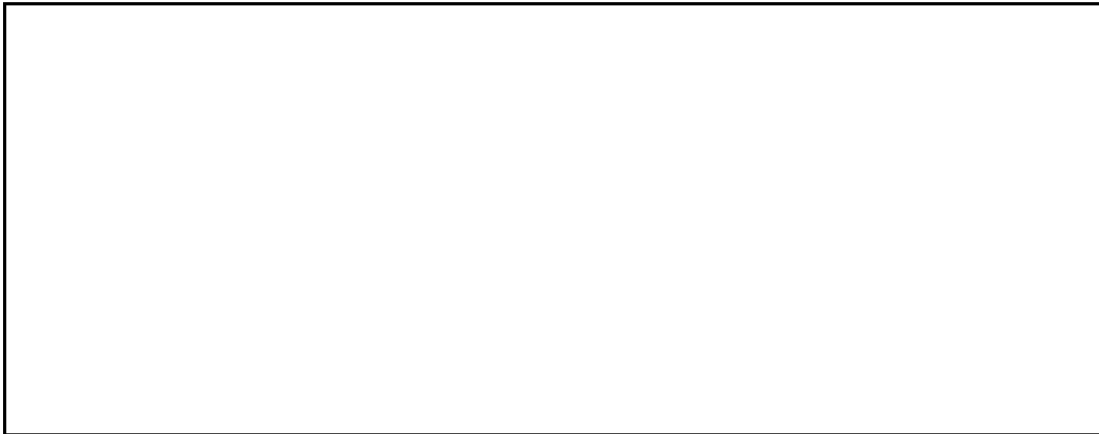
LAC -91
Page 3 of 3

NATURE OF PROPOSAL: (CONT)

8. It is proposed that only the main wing tanks be refueled in flight.
This necessitates the main tanks being used first. However, in
order to keep the c.g. within reasonable limits, toward the end
of the flight it will be necessary to switch over to the normal fuel
system management after the refueling operation is completed.
Investigation will be made to determine the effect of missed fuel-
ing connections and aborted missions at various ranges, to deter-
mine their effect on the c.g.

9. Two loadings will be assumed:

STATINTL

A report and drawings resulting from this study will be submitted

by the Contractor.

CONFIDENTIAL

31 August 1960

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DOCUMENT NO. _____
NO CHANGE IN CLASS. ☒
[ ] DECLASSIFIED
CLASS. CHANGED TO:  TS  S  C
NEXT REVIEW DATE: _____20⁷⁷/____
AUTH:  HR 70-2
DATE: 2/12/91 ____ REVIEWER: _____
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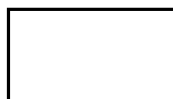
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Dear

Subject: Transmittal of Change Proposal

Enclosed are three (3) copies and one (1) brownline of our
Change Proposals, LAC-76-1 and LAC-91.
These proposals are submitted for your consideration and
approval.

Very truly yours,

25X1A

cc: DK with one copy of LAC-76-1
     four copies of LAC-91

25X1A

25X1A

2 copies LAC-91

9 Sept 60.

all cys destroyed approved

25X1A

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